

### REMARKS

The above-identified patent application has been amended and reconsideration and reexamination are requested.

The examiner rejected claims 1, 4-6, 10, 16, 17, 19 and 24 under 35 U.S.C. 102(e) as anticipated by Korhammer et al. US Patent 6,278,982.

Applicant's claims are distinct over Korhammer. Claim 1 recites ... a server process that receives quotes from the clients, aggregates the quotes and causes a total of all aggregated quotes to be displayed for a plurality of price levels on the client systems. The feature of a total of all aggregated quotes to be displayed for a plurality of price levels is not described by Korhammer. The examiner concedes that Korhammer does not explicitly disclose this feature and takes the position that Korhammer's teaching of "desired attributes" corresponds to applicant's recitation of "total of all aggregated quotes."

Applicant disagrees. Korhammer describes at Col. 4 lines 14-36,

These and other objects are achieved in the present invention consisting of a securities trading consolidation system. In this system, each customer uses a single application on a single trader terminal to view, and analyze security market information from and to conduct security transactions with two or more ECNs, or other comparable ATSS, alone or in combination with one or more electronic exchanges. A consolidating computer system ("CCS") supplies the market information and processes the transactions in the present system.

The trading terminals, each participating ECN order book computer, each participating electronic exchange, and the CCS form a computer network. The ECNs' order book computers, the electronic exchanges' servers and the CCS may, in actuality, each be complex systems consisting of a number of computers and networks. The CCS aggregates order book information from each participating ECN order book computer including security, order identification, and bid/offer price information. Bid and ask prices for participating electronic exchanges may be integrated into the display. The combined information is displayed to customers for the selected security separately for bids and offers, and sorted by

price, volume and other available attributes as desired by the customer.

The relevant teaching in Korhammer appears to be at Col. 4 lines 33-36. "The combined information is displayed to customers for the selected security separately for bids and offers, and sorted by price, volume and other available attributes as desired by the customer." Nowhere else in the quoted teaching or elsewhere in Korhammer does Korhammer describe "desired attributes." However, Korhammer is teaching to sort bids and offer by price, volume or other available attributes. The action of sorting individual bids and offers would not lead one to modify Korhammer to provide "a total of all aggregated quotes to be displayed for a plurality of price levels." One can clearly see that whatever meaning can be attributed to "desired attributes", it cannot be that a total of all aggregated quotes are displayed for a plurality of price levels, since the function of aggregating quotes to provide a total is not mentioned in Korhammer.

Hence claim 1 is distinct over Korhammer. Claims 4-6 serve to further limit claim 1 and are distinct over Korhammer.

Claim 10 as amended is distinguished over Korhammer since, Korhammer neither describes nor suggests a graphical user interface ... comprises an aggregate window having a first plurality of indicators that displays totals of aggregated interest of a second plurality of market participants that exists ... at each of a third plurality of price levels... .

Korhammer in Fig. 4 and 5 describes graphical user interfaces. The interfaces display quotes or orders of market participants (ECN and exchanges) but, do not display totals of aggregated interest of the market participants at each of a third plurality of price levels. No such aggregated window with indicia of aggregated interest is taught or suggested in Korhammer.

Hence claim 10 is distinct over Korhammer.

Claims 16 and 24, as amended, are distinct since Korhammer neither describes nor suggests ... aggregating non-attributable interest in the product to provide a total of all non-attributable interest at a plurality of price levels (claim 16) or instructions to aggregate (claim 24).

The examiner rejected claims 2, 3, 7-9, 11, 14, 15, 18, 20 and 21 under 35 U.S.C. 103(a) as obvious over Korhammer et al. US Patent 6,278,982 in view of Gutterman US Patent 5,297,031.

Claim 2 is further distinct since claim 2 recites that the server process causes a current quote window to be displayed ... in proximity to the aggregated quotes ... . The examiner takes the position that Korhammer fails to teach a current quote window to be displayed in proximity to the aggregated quotes and relies on Gutterman teachings at Col. 10 lines 20-33.

The examiner attention is drawn to FIGS. 4 and 5 of Korhammer. These figures are current quote windows. The examiner's statement is thus correct, but it is because Korhammer fails to teach the aggregated quotes and not the quote window. Therefore Korhammer cannot teach a current quote window to be displayed ... in proximity to the aggregated quotes.

The examiner relies upon Gutterman to supply the missing teachings of "The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column.10 lines 39-47)." This is not correct. According to Gutterman what is displayed is the total number of contracts at that price for incoming orders. There is no suggestion to combine these teachings since there has not been a showing that Korhammer would appreciate the benefit of aggregated quotes. Hence one would not be motivated to combine these references.

As for claim 7, claim 7 distinguishes by reciting that the current quote montage further comprises an identifier that represents the aggregate size of all non-attributable quotes/orders at the best bid/best offer displayed in the current quote montage. Korhammer does not distinguish between attributable and non-attributable interest in the market. Korhammer also does not suggest an identifier that represents the aggregate of all non-attributable interest. Hence claim 7 further distinguishes.

Claims 3, 8, 9, 11, 14, 15, 18, 20 and 21 serve to further distinguish their respective base claims and are allowable at least for those reasons.

The examiner rejected claims 12, 13, 22, and 23 under 35 USC 103(a) as obvious over Korhammer et al. US Patent 6,278,982 in view of Gutterman US Patent 5,297,031 and further in view of Martyn US Patent 6,278,982.

Claims 12 and 22 are distinct with their respective base claims. Claims 13 and 23 serve to further distinguish by reciting ... current quote window displays quotes that are attributable

quotes of participants ... and ... a special quote that represents total aggregate non-attributable quotes at a current market level included in an indicator in the aggregation window. This feature of a special quote that represents total aggregate non-attributable quotes at a current market level included in an indicator in the aggregation window is neither described nor suggested in any of the references.

In one embodiment, the special quote is the SIZE quote depicted in FIG. 9 and mentioned throughout applicant's specification. There are no teachings in the references to provide such a special quote since none of the references aggregate quotes to neither provide totals nor deal with attributable and non-attributable interest.

The references cited but not applied are seen as neither describing nor suggesting applicant's invention whether taken separately or in combination with the applied art.

Applicant has added new claims 25-49. These claims are likewise distinct over the references.

Claim 25 distinguishes by reciting ... a plurality of client stations for entering quotes ... being attributable or non-attributable to a market participant ... and a server process that receives the attributable and non-attributable quotes ..., aggregates the attributable and non-attributable quotes and ... a graphical user interface ... displaying a list of all attributable quotes in a current quote montage and a total of all attributable and non-attributable aggregated quotes for a plurality of price levels in an aggregated quote montage. This arrangement is not suggested.

Claims 26-31 serve to further limit claim 25.

Claim 27 for instance recites that the server process causes the aggregated quotes at the plurality of price levels to be rendered in the aggregate window by a corresponding plurality of controls, the controls which when selected by a user causes an execution against the interest displayed in the controls. This feature is not suggested by the references

Claim 32 distinguishes by reciting ... an aggregate window having a first plurality of indicators that displays totals of aggregated attributable and non-attributable interest of market participants at each of a plurality of price levels ... .

Claims 33-37 serve to further distinguish. Claim 33 for instance recites that the indicators are controls, the controls, which when selected by a user can cause an execution against the aggregated attributable and non-attributable interest displayed in the control.

Claim 38 distinguishes by reciting ... aggregating attributable and non-attributable interest in the product to provide a total of all attributable and non-attributable interest at a plurality of price levels and displaying the aggregated attributable and non-attributable interest in a window for the plurality of price levels of the product. The reference do not aggregating attributable and non-attributable interest and display the aggregated attributable and non-attributable interest in a window for the plurality of price levels.

Claims 39-43 serve to further limit claim 38.

Claim 43 for instance recites ... producing a current quote window that displays attributable quotes of participants .... and a size indicator quote that represents total non attributable aggregate quote size ... .

Claims 44-49 have analogous limitations to claims 38-43 and are likewise distinct.

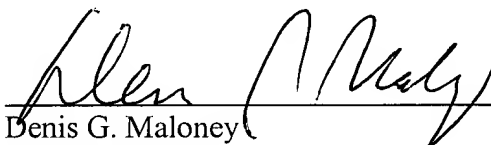
Attached is a marked-up version of the changes being made by the current amendment.

Applicant asks that all claims be allowed. Enclosed is a \$786 check for excess claim fees. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date:

00/02/02

  
\_\_\_\_\_  
Denis G. Maloney  
Reg. No. 29,670

Fish & Richardson P.C.  
225 Franklin Street  
Boston, Massachusetts 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

**Version with markings to show changes made**

**In the specification:**

The paragraph beginning at page 4, line 7 was amended as follows:

Referring to FIG. 1, an electronic market 10 is shown. The electronic market 10 includes client systems 12 that access a central quote/order collector facility 20. The client systems 12 can be broker/dealer systems 12a, electronic communication networks (ECN's) 12b, market-maker(s) [marker] system(s) 12c, and other exchanges 12d. The connections can use existing Nasdaq<sup>®</sup> protocols such as SelectNet<sup>®</sup>, Small Order Execution System<sup>®</sup> (SOES<sup>®</sup>), and so forth. The client systems 12 include a processor, memory and a storage device, e.g., a client workstation or personal computer (all not shown) that can include a client process to enter quotes/orders into the electronic market system. The quote/order collector facility 20 causes the order execution or order delivery systems (e.g., SOES<sup>®</sup> and SelectNet<sup>®</sup>) to deliver executions or orders to a market that is coupled to a clearing system 16 and a reporting system 18. It also causes delivery of executions or routing of orders to the ECN's 12c, depending on the status of the ECN, and routing of orders to other markets and exchanges 12d. The quote/order collector facility 20 is comprised of one or preferably a plurality of server computers generally denoted as 22 including a processor 22a, main memory 22b and storage 22c. The storage system 22c includes quote/order collector process 25 that is executed in memory 22b. In general, server 22 is a complex computer server, the details of which are not important to an understanding of the present invention. –

The paragraph beginning at page 4, line 30 was amended as follows:

The quote/order collector facility [25] (OCF) 20 collects pre-trade information in the form of quotes or orders. The distinction between a quote and an order depends on several factors. For example, each [a] market maker can send a proprietary quote i.e., a quote that represents its own trading interest or an agency quote that represents trading interest of a sponsored entity. If one proprietary quote is sent it could be considered one order. If one agency quote is sent it also could be considered one order. If an agency quote reflects an aggregation of

more than one agency order, however, the aggregate agency order could be considered a quote. Entering quotes are limited to registered market makers 12b and ECNs 12c and possible UTP Exchanges 12d. For any given stock, a registered market maker or ECN may directly enter a non-marketable order i.e., quote into the [system] quote/order collector facility (OCF) 20 on behalf of its customer account, or it may sponsor the direct entry of an order by its customer. All sponsored, quotes are sent to the quote/order collector facility 20 under the name of the sponsoring market maker or ECN. Every registered market maker or ECN will be permitted to submit an unlimited number of non-marketable quotes to the system 20.

The paragraph beginning at page 6, line 6 was replaced with following rewritten paragraph:

The current quote montage 204 of the window 200 without agency quotes is similar to the long existing Nasdaq display montage, whereas the current quote montage 204 with the agency quotes as depicted in FIG. 9 is similar to that shown in U.S. Patent Application Serial No. 09/208,942, filed on December 12, 1998 entitled "DUAL QUOTE MARKET SYSTEM" (pending) by Richard G. Ketchum et al. and assigned in part to the assignee of the present invention.

The paragraph beginning at page 6, line 27 was amended as follows:

The order quote collector facility 20 also includes an interface 21 that couples the order collector facility 20 to a plurality of order delivery systems. For example, the interface 21 can couple the order quote collector facility 20 to an order execution system, e.g., the Small Order Execution System<sup>®</sup> (SOES<sup>®</sup>) and to a negotiation system, e.g., SelectNet<sup>®</sup>. The interface 21 would provide access to information contained in order flow delivered via the delivery systems to a quote/order collection process 25 described in conjunction with FIG. 2B. In general, the electrical and logical functions which comprise the interface 21 can be similar to the ones currently existing in the SOES<sup>®</sup>/SelectNet<sup>®</sup> systems. The interface 21 or the process 25 would extract information from the quotes and make that information available to the quote order collector process 25. The quote/order collector process 25 extracts information and process

orders in a unified manner to allow the order collector [system] facility 20 to be a unifying point of collection of all orders which are sent to the market 10.

The paragraph beginning at page 7, line 21 was amended as follows:

Referring to FIG. 2B, the quote/order collector process ("OCP") 25 is shown. The quote/order collector process 25 provides transmission of multiple orders or quotes at multiple price levels by Quoting Market Participants to a quotation manager 26a. The quote/order manager 26a that provides a unified point of entry of quotes and orders from disparate delivery systems into the quote/order collector facility 20 to access quotes/orders displayed (as either attributable or non-attributable) in both the aggregate montage and current quote montage. The quote/order manager 26a manages multiple quotes/orders and quotes/orders at multiple price levels and uses a montage manager 26b to display (either in the Aggregate montage or in the current quote montage) the orders/quotes consistent with an order's/quote's parameters. The order collector process 25 also includes an internal execution process manager 26c to match off executions for quoting market participants at the best bid/offer. The order collector system 20 also includes an order routing/execution manager 26d provides a single point delivery of executions or routing of orders, which substantially eliminates potential for dual liability. That is, order collector process 25 will maintain the order routing and executions functionality available in the SOES<sup>®</sup> and SelectNet<sup>®</sup> systems. The order collector process 25 also includes a quote update manager 26e, a lock/cross [quote] manager 26f, and an odd lot execution manager 26g.

The paragraph beginning at page 8, line 22 was amended as follows:

The order entry process 25 determines 43 whether the received quote/order corresponds to a reserve quote. If the quote does not corresponds to a reserve quote then the quote is a displayable quote that is attributable or non-attributable. The order entry process 25 compares 44 the received quotes/orders to existing quotes/orders to determine 46 whether the price of quotes/orders fall in existing quote/order price levels 47. Any number of quote/order price levels can be accommodated although in this example, only three price levels will be displayable in the non-attributable i.e., aggregate montage. If the quote price is in a displayable price level it is a displayable quote eligible for automated execution. The order collector system 20 can be



provided with more price level depth than the three levels, e.g., a depth of 20-25 levels although only a limited number, e.g., three would be displayed at any one time.

The paragraph beginning at page 11, line 21 was amended as follows:

For example, if MMA sends system 20 all of its quotes/orders and is at the best bid of \$20 showing 4,000 shares (attributable and non-attributable), and the MMA sends OCP [OCF] 25 a 1,000 share market sell order from one its customers, OCP [OCR] 25 will examine 67a the identification of the order and if it matches the identification of the market participant who is at the best bid or offer for that security, the OCP 25 will execute 67b the order against the participant's own quote, thus matching off the order on behalf of the participant. The OCP 25 can call 67c a "request a cancel" function where a Quoting Market Participant can request cancellation of an order from system 20 before the order is actually executed. The request to cancel feature, along with the ability to leave orders with [system] OCF 20, will benefit ECNs by allowing them to participate in automatic execution and the internalized execution process 67 described above while minimizing the potential for double liability or taking on a proprietary position.

The paragraph beginning at page 12, line 26 was replaced with following rewritten paragraph:

SOES® and SelectNet® are configured to minimize the potential for dual liability, as described in copending patent application Serial No. 09/404,517 filed 9/23/1999 entitled DELIVERY SYSTEM FOR ORDERS IN AN ELECTRON MARKET which is incorporated herein by reference. In that application, to minimize the potential for dual liability (e.g., receipt of a Liability Order followed immediately by the delivery of an execution against a market maker's quote), the SelectNet® system is configured so that only a non-Liability Order could be delivered to those market participants who participate and are subject to automatic execution. To send a Liability Order to a market maker, a market participant would use the system to route the order to the next market maker in a queue. Market participants would still use SelectNet® to access quotes of ECNs that do not participate in SOES□ and to direct non-Liability Orders to a particular market maker. The SOES system is also reconfigured to an automated facility for the

handling of all market traded orders of less than a predetermined number of shares, e.g., 9,900 shares. The orders can be entered for execution against an expanded trading interest accessible through both displayed (and reserve size quotes described below).

In the claims:

Claims 8, 10, 12, 13, 16, and 24 has been amended as follows:

(Amended) 8. The system of claim 7 wherein the [identifer] identifier is displayed for both sides of the market.

(Amended) 10. A graphical user interface for an electronic market for trading products comprises:

an aggregate window having a first plurality of indicators that displays totals of [which displays] aggregated [quotes for] interest of a second plurality of market participants that exists in the electronic market at each of a third plurality of price levels of a product traded in the market.

(Amended) 12. The graphical user interface of claim 10 further comprising a current quote window disposed adjacent [an] the aggregate interest window and wherein said current quote window displays quotes that may be negotiable quotes of participants in the system.

(Amended) 13. The graphical user interface of claim 10 further comprising a current quote window disposed adjacent [an] the aggregate interest window and wherein said current quote window displays quotes that [may be negotiable] are attributable quotes of participants in the system and further comprises a special quote that represents total aggregate non-attributable quotes at a current market level [displayed] included in an indicator in the aggregation window.

(Amended) 16. A method of operating an electronic market for trading products comprises:

Applicant : Richard G. Ketchum  
Serial No. : 09/401,872  
Filed : September 23, 1999  
Page : 21

Attorney's Docket No.: 09857-027001

aggregating non-attributable interest in the product to provide a total of all non-attributable interest [for] at a plurality of price levels.

(Amended) 24. A computer program product for use in trading a product residing on a computer readable media comprising instructions for causing a computer to:

aggregate non-attributable interest in the product to provide a total of all non-attributable interest at a plurality of price levels.